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EXAMINER	
DUONG, CHRISTINE T	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

T/1

Office Action Summary	Application No. 10/815,563	Applicant(s) STEPHENS ET AL.
	Examiner Christine Duong	Art Unit 2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The references listed in the Information Disclosure Statement, filed on 13 June 2005, have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

Claim Objections

1. Claims 1, 5, 11, 13, 18, 20, 22, 23, 26, 28, 29, 31, 33, 36, 37, 38, 40are objected to because of the following informalities:

Regarding claims 1, 5, 11, 13, 18, 20, 22, 23, 26, 28, 29, 31, 33, 36, 37, 38, 40, the limitation “substantially” is not a positive recitation.

Claim 18 recites the limitation "the destination transport delay" in line 3-4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 28, it is suggested to rewrite “the source device and the destination device” in line 6-7 as --a source device and a destination device--.

Regarding claim 29, it is suggested to rewrite “the MAC-layer timestamp” in line 6 as --the source MAC-layer timestamp--.

Because of the limitation “the source application” in line 3-4, it is believed claim 36 was intended to depend on claim 35 and has been treated as such for the remainder of this Office Action.

Because of the limitation “the destination application” in line 4, it is believed claim 40 was intended to depend on claim 39 and has been treated as such for the remainder of this Office Action.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7, 9-14, 16, 18-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myles et al. (PG Pub US 2004/0008661 A1 hereafter Myles) further in view of Yonge, III et al. (PG Pub US 2005/0114489 A1 hereafter Yong).

Regarding claims **1, 23, 33**, Myles discloses an apparatus (figs. 3-8).

The limitation, a medium access control (MAC) packet production element (MPDU, fig. 4b), which produces a MAC packet that includes a source application-layer timestamp (TSFlocalout, fig. 4b), source data (data, fig. 4b), and a source MAC-layer timestamp (TSFbeaconout, fig. 4b), wherein the source MAC-layer timestamp is based on a substantially synchronized clock between a source device and a destination device ("Synchronization between TSFs in STAs and APs is achieved using time synchronization information in packets that contain time synchronization information, e.g., using beacon packets that each includes a timestamp" [0036] lines 5-8), and the source MAC-layer timestamp indicates a time when the source data is provided for transmission across a portion of a system that is subject to variable delays ("The MAC transmit HW 316 causes the beacon denoted Beacon(TSFbeaconout) with this timestamp TSFbeaconout to be transmitted by the PHY" [0085]).

The limitation, a clock that is capable of being used as the substantially synchronized clock ("an STA in an ad hoc network (IBSS) or an infrastructure network (BSS) receives packets containing time synchronization information, e.g., beacons, and synchronizes its local TSF timer to the network TSF using the time synchronization information in the received packet. The STA thus needs to determine the relationship between local TSF and the time synchronization information in the received packet" [0037] lines 1-8).

However, Myles fails to specifically disclose a source application-layer timestamp and the source MAC-layer timestamp is based on a substantially synchronized clock between a source device and a destination device.

Nevertheless, Yong teaches "The MSDU format 100 also provides support for the layer of the network architecture 50 that is higher than the MAC layer 54 to control when a delivery time stamp has to be inserted" (Yong [0059]) and "The MPDU header 258 carries local clock time stamp information. This time stamp can be used by the receiver MAC (e.g., 14) to synchronize with the transmitter MAC 12, thus enabling jitter free service" (Yong [0091] lines 9-13).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a source application-layer timestamp and the source MAC-layer timestamp be based on a substantially synchronized clock between a source device and a destination device because it will "provide support to enhance Quality of Service (QoS) support and efficient delivery of management information" (Yonge [0009] lines 4-6).

Regarding claims **11, 28, 37,** Myles discloses an apparatus (figs. 3-8).

The limitation, a transport delay calculation element, which calculates a transport delay applied to a medium access control (MAC) packet ("calculating an offset to the free-running clock using the extracted synchronization information and the local timestamp, the calculating in non real-time, such that the sum of the calculated offset and the value of the free-running clock provides a local clock value that is approximately synchronized in time" [0011] lines 12-17), wherein the MAC packet (MPDU, fig. 4a) includes a source MAC-layer timestamp (TSFbeaconout, fig. 4b), a source application-layer timestamp (TSFlocalout, fig. 4b), and source data (data, fig. 4b), and the transport delay is calculated based on the source MAC-layer timestamp and a substantially synchronized clock between the source device and the destination device ("Synchronization between TSFs in STAs and APs is achieved using time synchronization information in packets that contain time synchronization information, e.g., using beacon packets that each includes a timestamp" [0036] lines 5-8).

The limitation, a clock that is capable of being used as the substantially synchronized clock ("an STA in an ad hoc network (IBSS) or an infrastructure network (BSS) receives packets containing time synchronization information, e.g., beacons, and synchronizes its local TSF timer to the network TSF using the time synchronization information in the received packet. The STA thus needs to determine the relationship between local TSF and the time synchronization information in the received packet" [0037] lines 1-8).

However, Myles fails to specifically disclose a source application-layer timestamp and a substantially synchronized clock between the source device and the destination device.

Nevertheless, Yong teaches "The MSDU format 100 also provides support for the layer of the network architecture 50 that is higher than the MAC layer 54 to control when a delivery time stamp has to be inserted" (Yong [0059]) and "The MPDU header 258 carries local clock time stamp information. This time stamp can be used by the receiver MAC (e.g., 14) to synchronize with the transmitter MAC 12, thus enabling jitter free service" (Yong [0091] lines 9-13).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a source application-layer timestamp and a substantially synchronized clock between the source device and the destination device because it will "provide support to enhance Quality of Service (QoS) support and efficient delivery of management information" (Yonge [0009] lines 4-6).

Regarding claim **20**, Myles discloses a method (figs. 5-7).

The limitation, producing, by a source device (AP 105, fig. 1c), a medium access control (MAC) packet (MPDU, fig. 4b) that includes a source application-layer timestamp (TSFlocalout, fig. 4b), source data (data, fig. 4b), and a source MAC-layer timestamp (TSFbeaconout, fig. 4b), wherein the source MAC-layer timestamp is based on a substantially synchronized clock between the source device and a destination device ("Synchronization between TSFs in STAs and APs is achieved using time synchronization information in packets that contain time synchronization information,

e.g., using beacon packets that each includes a timestamp" [0036] lines 5-8), and the source MAC-layer timestamp indicates a time when the source data is provided for transmission across a portion of a system that is subject to variable delays ("The MAC transmit HW 316 causes the beacon denoted Beacon(TSFbeaconout) with this timestamp TSFbeaconout to be transmitted by the PHY" [0085]).

The limitation, transmitting the MAC packet from the source device to the destination device ("the transmit HW 316 transmits the beacon" [0087] lines 4-5).

The limitation, calculating, by the destination device, a transport delay applied to the MAC packet based on the source MAC-layer timestamp and a destination MAC-layer timestamp generated based on the substantially synchronized clock ("calculating an offset to the free-running clock using the extracted synchronization information and the local timestamp, the calculating in non real-time, such that the sum of the calculated offset and the value of the free-running clock provides a local clock value that is approximately synchronized in time" [0011] lines 12-17).

However, Myles fails to specifically disclose a source application-layer timestamp, the source MAC-layer timestamp is based on a substantially synchronized clock between the source device and a destination device and the source MAC-layer timestamp and a destination MAC-layer timestamp generated based on the substantially synchronized clock.

Nevertheless, Yong teaches "The MSDU format 100 also provides support for the layer of the network architecture 50 that is higher than the MAC layer 54 to control when a delivery time stamp has to be inserted" (Yong [0059]), "The MPDU header 258

carries local clock time stamp information. This time stamp can be used by the receiver MAC (e.g., 14) to synchronize with the transmitter MAC 12, thus enabling jitter free service" (Yong [0091] lines 9-13) and "the Delivery time stamp 156 in the Sub-Frames 150 to determine when the corresponding MSDU 71 has to be delivered to the higher layer at the receiver. Synchronization of the clocks of the transmitters (e.g., MAC 12) and receivers (e.g., MAC 14) is obtained by transmitters inserting its local clock time stamp in MPDU header 258 and receiver using this to synchronize with the transmitter" (Yong [0129] lines 3-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a source application-layer timestamp, the source MAC-layer timestamp be based on a substantially synchronized clock between the source device and a destination device and the source MAC-layer timestamp and a destination MAC-layer timestamp generated based on the substantially synchronized clock because it will "provide support to enhance Quality of Service (QoS) support and efficient delivery of management information" (Yonge [0009] lines 4-6).

Regarding claims **2, 24, 34**, Myles and Yonge discloses everything claimed as applied above (see claims 1, 23, 33 respectively). In addition, Myles discloses the limitation, a source application interface, which receives an application-layer packet from a source application ("receives data 324 from a data link (or higher) level interface of the wireless station" [0048] lines 8-10), wherein the application-layer packet includes the source application-layer timestamp (TSFlocalout, fig. 4b) and the source data (data, fig. 4b).

The limitation, a timestamp generation element, which generates the source MAC-layer timestamp in response to receiving the application-layer packet ("TSFbeacon out denotes the timestamp value that is inserted into an outgoing beacon MPDU for transmission" [0062]).

Regarding claim **3**, Myles and Yonge discloses everything claimed as applied above (see claim 2). In addition, Myles discloses the limitation, generating the source MAC-layer timestamp when the application-layer packet enters a medium access control layer of the source device ("The MAC transmit HW 316 causes the beacon denoted Beacon(TSFbeaconout) with this timestamp TSFbeaconout to be transmitted by the PHY" [0085]).

Regarding claims **4, 25, 35**, Myles and Yonge discloses everything claimed as applied above (see claims 1, 23, 33 respectively). In addition, Myles discloses the limitation, a source application interface, which receives an application-layer packet from a source application ("receives data 324 from a data link (or higher) level interface of the wireless station" [0048] lines 8-10), wherein the application-layer packet includes the source application-layer timestamp (TSFlocalout, fig. 4b), the source data (data, fig. 4b), and the source MAC-layer timestamp (TSFbeaconout, fig. 4b).

Regarding claims **5, 26, 36**, Myles and Yonge discloses everything claimed as applied above (see claims 4, 23, 35 respectively). In addition, Myles discloses the limitation, a clock interface, which enables the substantially synchronized clock to be provided to a source application ("a local free-running clock includes the STA receiving a packet that contains synchronization information, for example in a beacon packet

having a timestamp field, and generating a local timestamp by taking a copy (in hardware) of the local free-running clock at a known receive reference point during reception of the packet" [0041] lines 2-7).

Regarding claim **6**, Myles and Yonge discloses everything claimed as applied above (see claim 1). In addition, Myles discloses the limitation, establishing a fixed transport delay value (Toffsetin or Toffsetout) for the destination device to use to schedule delivery of the source data to a destination application (table 1 or table 2).

Regarding claims **7 and 16**, Myles and Yonge discloses everything claimed as applied above (see claims 6 and 14). In addition, Myles discloses the limitation, performing a negotiation process between the source device and the destination device to determine the fixed transport delay value (table 1 or table 2, where the negotiation has been established by "the IEEE 802.11a standard for transmission using OFDM" [0074] lines 6-7).

Regarding claim **9**, Myles and Yonge discloses everything claimed as applied above (see claim 1). In addition, Myles discloses the limitation, transmitting the MAC packet toward the destination device ("the transmit HW 316 transmits the beacon" [0087] lines 4-5).

Regarding claim **10**, Myles and Yonge discloses everything claimed as applied above (see claim 1). In addition, Myles discloses the limitation, the source device is a wireless local area network communications device ("wireless communication node 200 for use in a wireless network", fig. 2), and wherein producing the MAC packet is

performed by a medium access control device of the source device (STA MAC Administrator 302, fig. 6).

Regarding claim **12**, Myles and Yonge discloses everything claimed as applied above (see claim 11). In addition, Myles discloses the limitation, a destination application using the transport delay and the source application-layer timestamp to perform an application clock recovery process ("a local free-running clock includes the STA receiving a packet that contains synchronization information, for example in a beacon packet having a timestamp field, and generating a local timestamp by taking a copy (in hardware) of the local free-running clock at a known receive reference point during reception of the packet" [0041] lines 2-7).

Regarding claims **13, 22, 29, 38,** Myles and Yonge discloses everything claimed as applied above (see claims 11, 20, 28, 37 respectively). In addition, Myles discloses the limitation, a destination MAC-layer timestamp generation element, which generates a destination MAC-layer timestamp (TSFbeaconin, fig. 4a) that indicates an approximate time when the source data will be provided to a destination application.

The limitation, the destination MAC-layer timestamp is based on the substantially synchronized clock ("Synchronization between TSFs in STAs and APs is achieved using time synchronization information in packets that contain time synchronization information, e.g., using beacon packets that each includes a timestamp" [0036] lines 5-8).

The limitation, the destination MAC-layer timestamp and the MAC-layer timestamp are used in calculating the transport delay ("calculating an offset to the free-

running clock using the extracted synchronization information and the local timestamp, the calculating in non real-time, such that the sum of the calculated offset and the value of the free-running clock provides a local clock value that is approximately synchronized in time" [0011] lines 12-17).

However, Myles fails to specifically disclose a destination MAC-layer timestamp generation element, which generates a destination MAC-layer timestamp that indicates an approximate time when the source data will be provided to a destination application and the destination MAC-layer timestamp is based on the substantially synchronized clock.

Nevertheless, Yong teaches "The MPDU header 258 carries local clock time stamp information. This time stamp can be used by the receiver MAC (e.g., 14) to synchronize with the transmitter MAC 12, thus enabling jitter free service" (Yong [0091] lines 9-13) and "the Delivery time stamp 156 in the Sub-Frames 150 to determine when the corresponding MSDU 71 has to be delivered to the higher layer at the receiver. Synchronization of the clocks of the transmitters (e.g., MAC 12) and receivers (e.g., MAC 14) is obtained by transmitters inserting its local clock time stamp in MPDU header 258 and receiver using this to synchronize with the transmitter" (Yong [0129] lines 3-10).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a destination MAC-layer timestamp generation element, which generates a destination MAC-layer timestamp that indicates an approximate time when the source data will be provided to a destination application and the destination MAC-layer timestamp is based on the substantially synchronized

clock because it will "provide support to enhance Quality of Service (QoS) support and efficient delivery of management information" (Yonge [0009] lines 4-6).

Regarding claims **14, 21, 39**, Myles and Yonge discloses everything claimed as applied above (see claims 11, 20, 37 respectively). In addition, Myles discloses the limitation, establishing a fixed transport delay value (Toffsetin or Toffsetout) for the destination device to use to schedule delivery of the source data to a destination application (table 1 or table 2).

The limitation, delaying delivery of the MAC packet to the destination application by a retiming delay, which is approximately equal to the fixed transport delay value minus the transport delay ("The adjustment Toffset is updated using a beacon received from the station's own AP in the BSS. Toffset is updated to the sum of the beacon time TSFbeaconin, less the sum of the copied clock TSFlocalin and the adjustment Toffsetin" [0078] lines 2-6 and "the offset is recalculated every time a beacon is received, and in the case that the STA is in an IBSS, the offset is recalculated if the local synchronized time lags the received synchronized time" [0042] lines 12-15).

Regarding claims **18 and 40**, Myles and Yonge discloses everything claimed as applied above (see claims 11 and 39 respectively). In addition, Myles discloses the limitation, providing access to the substantially synchronized clock to the destination application, to enable the destination application to calculate the transport delay and to perform a clock recovery process ("a local free-running clock includes the STA receiving a packet that contains synchronization information, for example in a beacon packet having a timestamp field, and generating a local timestamp by taking a copy (in

hardware) of the local free-running clock at a known receive reference point during reception of the packet" [0041] lines 2-7 and "The adjustment Toffset is updated using a beacon received from the station's own AP in the BSS. Toffset is updated to the sum of the beacon time TSFbeaconin, less the sum of the copied clock TSFlocalin and the adjustment Toffsetin" [0078] lines 2-6).

Regarding claim **19**, Myles and Yonge discloses everything claimed as applied above (see claim 11). In addition, Myles discloses the limitation, the destination device is a wireless local area network communications device ("wireless communication node 200 for use in a wireless network", fig. 2), and wherein calculating the transport delay is performed by a medium access control element of the destination device (STA MAC Administrator 302, fig. 5).

Regarding claim **27**, Myles and Yonge discloses everything claimed as applied above (see claim 23). In addition, Myles discloses the limitation, the apparatus forms a portion of a wireless local area network device ("wireless communication node 200 for use in a wireless network" [0032] lines 1-2 and fig. 2).

The limitation, an antenna for transmitting the MAC packet over a device-to-device communication link ("at least one antenna 202 for 5G Hz carrier service ... and a wireless transceiver 205" [0032] lines 6-8 fig. 2).

Regarding claim **30**, Myles and Yonge discloses everything claimed as applied above (see claim 28). In addition, Myles discloses the limitation, a fixed transport delay element, which delays delivery of the source data to a destination application by a retiming delay that is approximately equal to a fixed transport delay value minus the

transport delay ("The adjustment Toffset is updated using a beacon received from the station's own AP in the BSS. Toffset is updated to the sum of the beacon time TSFbeaconin, less the sum of the copied clock TSFlocalin and the adjustment Toffsetin" [0078] lines 2-6 and "the offset is recalculated every time a beacon is received, and in the case that the STA is in an IBSS, the offset is recalculated if the local synchronized time lags the received synchronized time" [0042] lines 12-15).

Regarding claim **31**, Myles and Yonge discloses everything claimed as applied above (see claim 28). In addition, Myles discloses the limitation, a clock interface, which enables the substantially synchronized clock to be provided to a destination application ("a local free-running clock includes the STA receiving a packet that contains synchronization information, for example in a beacon packet having a timestamp field, and generating a local timestamp by taking a copy (in hardware) of the local free-running clock at a known receive reference point during reception of the packet" [0041] lines 2-7).

Regarding claim **32**, Myles and Yonge discloses everything claimed as applied above (see claim 28). In addition, Myles discloses the limitation, the apparatus forms a portion of a wireless local area network device ("wireless communication node 200 for use in a wireless network" [0032] lines 1-2 and fig. 2).

The limitation, an antenna for receiving the MAC packet over an air interface ("at least one antenna 202 for 5G Hz carrier service ... and a wireless transceiver 205" [0032] lines 6-8 fig. 2).

4. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myles and Yong further in view of Chapman (PG Pub US 2005/0058159 A1 hereafter Chapman).

Regarding claims **8 and 17**, Myles and Yonge discloses everything claimed as applied above (see claims 6 and 14). However, Myles and Yonge fails to specifically disclose the limitation, determining a longest observed delay between the source device and the destination device to determine the fixed transport delay value.

Nevertheless, Chapman teaches "the master timestamp counter 44A in the master TSC 18A has a particular timestamp value at pulse 50 of synchronization pulses 14. In this example, the timestamp counter value is thirty. At a next pulse 52, the value of master timestamp counter 44A is thirty five. The processor 40A in master TSC 18A calculates the period T between pulses 50 and 52 to be five counts. The processor 40A predicts that the master timestamp counter 44A will have a value of forty at pulse 54" (Chapman [0026] lines 3-11).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to determine a longest observed delay between the source device and the destination device to determine the fixed transport delay value because "the timestamp counters 44 are used for counting an amount of time between synchronization pulses 14 and generating a local clock 46" (Chapman [0025] lines 4-6).

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myles and Yonge further in view of Trachewsky et al. (PG Pub US 2003/0206559 A1 hereafter Trachewsky).

Regarding claim **15**, Myles and Yonge discloses everything claimed as applied above (see claim 14). However, Myles and Yonge fails to specifically disclose the limitation, discarding the source data if the transport delay exceeds the fixed transport delay value.

Nevertheless, Trachewsky teaches "Late packet arrival--packets which arrive too late will be discarded, and are effectively, lost. For example, at the home LAN/WAN interface, late-arriving upstream VoIP packets will be discarded, since they cannot be expected to arrive on time anywhere else along the path once they are late at the WAN interface" (Trachewsky [0374]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to discard the source data if the transport delay exceeds the fixed transport delay value because "MAC devices use these timestamps to synchronize their local clocks in their respective timestamp recovery circuit 2048" (Trachewsky [0386] lines 32-34).

Citations of Pertinent Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wetzel et al. (PG Pub US 2004/0177162 A1) discloses using a system level clocking scheme to remove jitter from multi-media packets distributed over an asynchronous network, in particular an Ethernet network.

Boles et al. (PG Pub US 2004/0057539 A1) discloses a clock recovery method wherein the FIFO delay of data words and the phase difference between a data word and a receiver clock are used to time data transmissions from a transmitter.

Ngo (US Patent No. 6,510,150 B1) discloses synchronizing timestamps in a network (e.g., a wireless ATM network) that includes a control node and plurality of other nodes that communicate with one another over a common channel mediated by a medium-access control subsystem (e.g., one that uses a reservation-based TDMA protocol).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Duong whose telephone number is (571) 270-1664. The examiner can normally be reached on Monday - Friday: 830 AM-6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Seema S. Rao
SEEMA S. RAO 2/19/08
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CTD 02/11/2008 CTD